

tenance, but the writer has endeavoured to make the comparison between the two systems as fair as possible. It is not intended to include any item of depreciation in these repairs and maintenance figures. It will be noted that a marked difference is made between the maintenance of a third rail and trolley by allowing one per cent. in the one case and four per cent. in the other. The apparent discrepancy in allowing five per cent. for the maintenance and repairs on the high tension line and only four per cent. for that of the trolley is explained by the fact that the five per cent. on the high tension line includes the repairs and maintenance and the supporting structure for the trolleys.

The matter of inspection of the A.C. sub-stations is taken care of by allowing six per cent. in the case of the A.C. sub-stations instead of four per cent. as in the D.C. sub-stations.

In the matter of repairs and maintenance of the car equipments, it will be noted that twelve per cent. is allowed in the D.C. system and only ten per cent. in the A.C. system. Even this difference in percentage allows \$10,000 per year for the maintenance of the A.C. equipments in the place of \$7,500 for the D.C., or twenty-five per cent. more for the A.C. than for the D.C. The A.C. motors being lower in voltage and being protected from direct lightning discharges by the intervention of a transformer ought to have at least a no higher maintenance bill than the D.C. motors. The number of motors in each case is the same. The A.C. system, however, will require a certain amount of attention for the transformers and regulators. This item, though necessarily not based on experience, is estimated to represent the comparative conditions as closely as is possible at this time.